



Interactive Effects of Public Foreign Capital Inflows and Domestic Investment on Growth in Emerging Market

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Abstract

Objective – The objective of this study is to examine the interactive effects of public capital inflows and domestic investment on economic growth.

Design/methodology – The autoregressive distributed lag (ARDL) method was employed in the study to analyze the study outcome since the variables of the study are integrated at 1(0) and 1(1). More so, the sample size is relatively small. Following the theoretical framework, and objectives of this study, we developed two ARDL models to ascertain if public capital flows and domestic investment spur growth and whether a substitution or complementarity effect is found if public capital flows interact with domestic investment.

Results – The study outcome showed that while aid (ODA) and domestic investment (DI) contribute positively to growth, foreign borrowing (FB) affects growth adversely in Nigeria. More so, the study further revealed that the interaction of foreign aid and domestic investment indicates a complementarity relationship, while the interaction of foreign borrowing and domestic investment shows a substitution effect.

Research limitations/implications – The study is a single-country study that focuses on Nigeria's economy. To generalize the findings of the research, further research involving sub-Saharan Africa and other less developing countries can be investigated. Notwithstanding these limitations, the findings from the study will assist development partners and policymakers in the provision of a framework to develop implement, and manage long-term economic policies as regards public capital inflows and domestic investment.

Novelty/Originality – The contribution of this study lies in establishing a complementarity relationship in the interaction of ODA and DI on growth; and a substitution relationship in the interaction of FB and DI on growth in Nigeria.

Keywords: Foreign Borrowing, ARDL, Aid, Domestic Investment, Nigeria, Growth

1. Introduction

The central aim of every emerging economy is to achieve sustainable growth. The constraints (shortage of funds) faced by developing economy has prevented them from obtaining the desired growth level. The quest for capital inflows by developing economies including Nigeria is a result of the export-import gap and savings-investment gap. Empirical findings by (Mustafa, Ahmed, & Ahmed, 2019; Setargie, 2015; Spilioti, 2015) indicate that foreign borrowing and aid enhance developing economy growth because it closes the savings-investment gap and enables them to purchase the required technology necessary for growth. However, scholarly findings by (Girma, 2015; Ikpesu, 2020; Tadesse, 2011) show that aid harms growth because it makes the developing economy to be trapped in a vicious cycle and poverty due to over-reliance on aid. More so, Kharusi and Ada, (2018) argued that foreign burdens retard growth due to interest payment and principal repayment burdens.

Nigeria has a country has been one of the major recipients of public capital inflows for years but the country still has a low GDP growth rate, high unemployment rate, and poverty and this has prompted the question of whether public capital inflows

enhance or retard growth among scholars and policymakers (aderounmu & Adeniyi 2019). Hence, the reasons for embarking on this study.

In addition, the study identified the following research gaps. The literature remains silent on whether a complementarity or substitution relationship exists when the inflow of public capital (aid and foreign borrowing) and domestic investment interact in Nigeria thus, necessitating the need for the study. More so, in the empirical literature, most studies paid attention to the growing influence of private capital inflows (foreign direct investment and portfolio investment) both in the country-level study and cross-countries studies thus ignoring the interaction of public capital inflows and domestic investment on growth. In the light of this, the purpose of this study is to examine the interactive effect of public capital inflows and domestic investment on growth in emerging markets using Nigeria as a case study.

The remaining part of the study is structured as follows: section 2 shows the review of theories and empirical literature, and section 3 depicts the methodology deployed. Section 4 shows the study findings and the last section concludes the paper.

2. Literature Review, Theoretical Framework, and Hypothesis Development

Conscientious studies have been embarked upon in the last several years supported by many capital inflows theories. For instance, modernization theory posits that every economy follows a particular pattern of growth and that the under-development the developing economies are experiencing has also been experienced by the developed economy (Kabonga, 2016). Dependency theory, on the other hand, emerged as a result of the short-fall of modernization theory which does not provide any reason for aid to developing nations. The theory shows that resources flow from poor nations known as the periphery to the rich nations known as the core and that the core benefits immensely from the resources of the periphery. However, the antagonist of the theory argued that the flow of aid to the less developed economy has improvised because the rich nations used aid to monitor and control the poor nations and maintain hegemony (Kabonga, 2016). Many studies in the literature have examined whether public capital inflows spur or retard growth. For instance, (Ogege & Ekpudu, 2010) findings showed that aid retard growth in Nigeria. This finding was also supported by (Ajayi & Oke, 2012) who documented that aid negatively harms growth in Nigeria. Forgha, Mbella, and Ngangnchi, (2014) also concluded that in Cameroon between the period 1980 and 2013, aid affects growth negatively. Genc and Tandogan, (2015) also showed that aid harms growth in Turkey between the period 1971 to 2011. (Setargie, 2015) documented that between 1974 to 2013 aid spurred Ethiopia's growth positively. research findings by Abd el Hamid Ali, (2013) revealed that foreign aid positively spurs growth in Egypt. However, in the empirical literature, some studies argued that aid retards growth. For instance, Tadesse, (2011) concluded that in Egypt, aid retard growth because of poor economic policies. Also, (Ndambiri et al., 2012) concluded that in SSA between the periods 1982 and 2000 aid harmed growth. Girma, (2015) research findings also revealed that between 1974 and 2011, that aid harms Ethiopian growth. Galiani, Knack, Xu, and Zou, (2016) using a quasi-experiment showed that aid affected growth positively. The study was based on data from thirty-five economies for the period 1987 and 2010. Alemu, (2017) using GMM showed that aid has a positive link with economic growth for low-income African economies. The study was based on data obtained from nineteen low-income African economies for the period 1998 and 2013. Deploying an ARDL method, Sothan, (2018) revealed that in the short-run aid has a positive effect on economic growth while in the long-run, aid harms economic growth in Cambodia's economy from the period 1980 and 2014.

In addition, aderounmu and Adeniyi, (2019) using an ARDL method showed that in Nigeria between the period 1981 and 2016, aid affected growth positively. Sen, Islam, Nahr, and Dewan, (2019) explained the growth effect of aid in Bangladesh and showed that aid does not affect the country. The study used ordinary least square

(OLS) estimation to analyze data obtained from Bangladesh. The period of the study was 1996 and 2015. Deploying a vector-autoregressive (VAR) approach, Sethi, Bhujabal, Das, and Sucharita, (2019) showed that for the period 1960 and 2015, aid did not have a significant impact on growth in Sri Lanka.

Furthermore, findings by Sulaiman, Oke, and Azeez, (2012) showed that between the period 1970 and 2010, foreign borrowing positively spurs growth in Nigeria. Also, Spilioti, (2015) used data from Euro area economies for 1981 and 2014. The study concluded that debt has been beneficial to the growth of Euro-area nations. Mohanty & Mishra, (2016) using fully modified ordinary least square and dynamic ordinary least square concluded that for the period 1980 and 2014, foreign borrowing positively contributed to growth in Indian states. Haagsma, (2016) also noted that debt servicing affects growth negatively in Ethiopia between the period 1981 to 2014. Moussa & Shawawreh, (2017) used the least square method, the study confirmed that foreign borrowing adversely affects growth in Jordan between the periods 2000 to 2015. Musibau, Mahmood, Ismail, Shamsuddin, and Rashid, (2018) using a panel data analysis investigated the growth effect of foreign debt on ECOWAS member countries for the period 1980 to 2015. The study concluded that foreign debt stimulated growth in the region.

However, Kharusi & Ada, (2018) findings showed that debt affects Oman's growth adversely. The result was similar to Saxena & Shanker, (2018) employing OLS to investigate the growth effect of foreign borrowing on Indian growth. The result revealed that foreign debt affected growth negatively in India. Gachunga, (2018) documented that foreign debt affected the SSA region negatively. The result was based on data gathered for the period 1990 to 2016 in thirty-eight Sub-Saharan economies. The study employed the GMM technique in analyzing the data. Besides, Ud-Din, Khan, and Tariq, (2020) deploying the least square approach showed that for the period 1980-to 2016, foreign debt harms growth in Pakistan. Matandare & Tito, (2018) employing OLS examined how public debt affected growth in Zimbabwe between 1980 and 2018. The outcome of the study established that foreign debt affected growth negatively. (Ali, Dalmar, and Ali, 2018) employing OLS explored the effect of foreign borrowing on the growth of Somalia's economy from 1970 to 2014. The outcome of the study confirmed that there was an insignificant impact of external debt on Somalian growth.

In addition, (Ningsih, Naruliza, and Mario, 2018) confirmed that during the reign of the new order, external debt does not affect Indonesia's growth. However, during the old order and reform, debt has been a veritable source in achieving growth in Indonesia. The study used a quantitative method to show the growth effect of foreign borrowing in the new order, old order, and reform. (Shkolnyk & Koilo, 2018) employing an ARDL model examined the growth effect of foreign borrowing on Ukraine's economy for the period 2006 and 2016. The study confirmed that debt affected growth adversely in Ukraine. More so, (Özge Kılıç & Beşer, 2019) concluded that there was a presence of a long-run link between foreign debt and growth in Greece, Italy, Portugal, Spain, and Ireland for the period 1995 to 2015. (Shangai & Ochieng, 2019) investigated the growth of foreign debt in East African economies for the period 2000 to 2017. The study concluded that foreign debt has positively influenced the growth of Kenya, Uganda, Rwanda, Burundi, and Tanzania. The study used the panel data method.

Asghar, (2016) examined the growth effect of external debt in Pakistan for the period 1986 to 2015. The study employing the OLS method showed that foreign borrowing has supported the growth of Pakistan's economy. (Saungweme & Odhiambo, 2019) employing an ARDL technique showed that in Zimbabwe for the period 1970 to 2017 foreign debt harms Zimbabwe's economy.

In the extant literature, the growth effect of domestic investment has also been examined. Most of the extant studies conclude that domestic investment spurs growth

(Bakari, 2018; Chidoko & Sachirarwe, 2015; Emeka, Idenyi, & Nweze, 2017; Ilegbinosa, Micheal, & Watson, 2015; Iya & Aminu, 2015; Omoregie & Ikpesu, 2017).

Based on the review of extant studies, the study identified the following research gaps. The literature, however, remains silent on whether a complementarity or substitution relationship exists when the inflow of public capital (aid and foreign borrowing) and domestic investment interact. Besides, most studies in the empirical literature paid attention to the growing influence of private capital inflows (foreign direct investment and portfolio investment) both in the country-level study and cross-countries studies thus ignoring the interactive effects of public capital inflow and domestic investment on growth. Hence, the objective of this paper is to examine the interactive effect of public capital inflows and domestic investment on growth in emerging markets using Nigeria as a case study.

Theoretical Framework and Hypothesis Development

The theoretical underpinning of the study is based on the Augmented Solow growth theory which was developed by (Mankiw, Romer, and Weil, 1992). (Mankiw et al., 1992) argued that the Augmented Solow growth model, the Solow model will be a better fit for human capital is added to the model. Equation 1 shows the expression of the augmented Solow growth model.

$$Y_t = f(A_t K_t L_t HC_t)$$

(1)

Where: Y represents output at time t; A denotes Technology at time t; K represents Physical capital stock at time t; L denotes Labour stock at time t, and HC represents Human capital. According to Chenery, and Strout, (1968) economies can acquire the needed technology via public capital inflows (ODA and FB) to spur growth. Therefore, technology (A_t) stands for public capital flows (aid and foreign borrowing).

$$Y_t = f(A_t K_t L_t HC_t)$$

(2)

The rearrangement of equation (1) and (2) gives:

$$Y_t = f(ODA_t FB_t K_t L_t H_t)$$

(3)

The study also included some control variables such as inflation, exchange rate, and government expenditure to capture the macroeconomic dynamics in the economy. Thus, equation (3) becomes

$$Y_t = f(ODA_t FB_t K_t L_t H_t INF_t REXR_t GOVEXP_t)$$

(4)

Expressing equation (4) in econometrics form

$$GDPGR_t = \phi_0 + \phi_1 ODA_t + \phi_2 FB_t + \phi_3 DI_t + \phi_4 LAB_t + \phi_5 HC_t + \phi_6 INF_t + \phi_7 REXR_t + \phi_8 GOVEXP_t + \mu_t$$

(5)

In equation (5) economic growth (GDP) is used to substitute Y_t , domestic investment (DI) is used to substitute K_t , while labor force (LAB) is used to substitute L_t . Where ϕ_0 is constant, ϕ_1 to ϕ_8 is parameters and μ_t is the error term.

Hypothesis Development

Based on the review of the empirical literature, theories, and theoretical framework, the study develops the following null hypothesis:

H1: Public capital inflows and domestic investment have no significant effect on economic growth.

H2: Public capital inflows and domestic investment have a significant effect on economic growth.

H3: The interaction of public capital inflows and domestic investment has no significant effect on economic growth.

H4: The interaction of public capital inflows and domestic investment has a significant effect on economic growth.

3. Research Method

The study employed the following data: GDP growth rate (GDP), foreign borrowing (FB), labor force (LAB), government expenditure (GOVEXP), inflation rate (INF), official development assistance (ODA), domestic investment (DI), human capital (HC) and real exchange rate (REXR). The data were obtained from a statistical bulletin published by the Central Bank of Nigeria (CBN) and also from World Development Indicators (WDI) between the periods 1981 to 2017. 1981 was selected since the period denotes when the nation was faced with severe economic crises as a result of the oil glut that occurred in 1980 resulting in to collapse of the most manufacturing firms, high cost of living, the balance of payment crises, food shortage crises, high unemployment rate, and slow growth.

The autoregressive distributed lag (ARDL)

The autoregressive distributed lag (ARDL) method was employed in the study to analyze the study outcome since the variables of the study are integrated at 1(0) and 1(1). More so, the sample size is relatively small. Following the theoretical framework, and objectives of this study, we developed two ARDL models to ascertain if public capital flows and domestic investment spur growth and whether a substitution or complementarity effect is found if public capital flows interact with domestic investment.

Model 1

The ARDL model for the first objective is shown as:

$$\begin{aligned} \Delta \text{GDPGR}_t = & \theta_0 + \sum_{i=0}^g \theta_1 \Delta \text{GDPGR}_{t-1} + \sum_{i=0}^g \theta_2 \Delta \log(\text{ODA})_{t-1} + \sum_{i=0}^g \theta_3 \Delta \log(\text{FB})_{t-1} \\ & + \sum_{i=0}^g \theta_4 \Delta \log(\text{DI})_{t-1} + \sum_{i=0}^g \theta_5 \Delta \text{LAB}_{t-1} + \sum_{i=0}^g \theta_6 \Delta \text{HC}_{t-1} \\ & + \sum_{i=0}^g \theta_7 \Delta \text{REXR}_{t-1} + \sum_{i=0}^g \theta_8 \Delta \text{INF}_{t-1} + \sum_{i=0}^g \theta_9 \Delta \log(\text{GOVEXP})_{t-1} \\ & + \alpha_1 \Delta \text{GDPGR}_{t-1} + \alpha_2 \Delta \log(\text{ODA})_{t-1} + \alpha_3 \Delta \log(\text{FB})_{t-1} \\ & + \alpha_4 \Delta \log(\text{DI})_{t-1} + \alpha_5 \Delta \text{LAB}_{t-1} + \alpha_6 \Delta \text{HC}_{t-1} + \alpha_7 \Delta \text{REXR}_{t-1} \\ & + \alpha_8 \Delta \text{INF}_{t-1} + \alpha_9 \Delta \log(\text{GOVEXP})_{t-1} + \text{ECT}_{t-1} + \mu_t \end{aligned}$$

Where: Log(ODA) is the log of foreign aid; Log(FB) is the log of foreign borrowing; Log(GOVEXP) is the log of government expenditure θ_0 is the drift components, Δ is the first difference operator; g is maximum lag length; t is time, while ε is the error term, and ECT is Error correction.

Model 2

The ARDL model for the second objective is shown as:

$$\begin{aligned} \Delta \text{GDPGR}_t = & \theta_0 + \sum_{i=0}^g \theta_1 \Delta \text{GDPGR}_{t-1} + \sum_{i=0}^g \theta_2 \Delta \log(\text{ODA} * \text{DI})_{t-1} \\ & + \sum_{i=0}^g \theta_3 \Delta \log(\text{FB} * \text{DI})_{t-1} + \sum_{i=0}^g \theta_4 \Delta \log(\text{DI})_{t-1} + \sum_{i=0}^g \theta_5 \Delta \text{LAB}_{t-1} \\ & + \sum_{i=0}^g \theta_6 \Delta \text{HC}_{t-1} + \sum_{i=0}^g \theta_7 \Delta \text{REXR}_{t-1} + \sum_{i=0}^g \theta_8 \Delta \text{INF}_{t-1} \\ & + \sum_{i=0}^g \theta_9 \Delta \log(\text{GOVEXP})_{t-1} + \alpha_1 \Delta \text{GDPGR}_{t-1} \\ & + \alpha_2 \Delta \log(\text{ODA} * \text{DI})_{t-1} + \alpha_3 \Delta \log(\text{FB} * \text{DI})_{t-1} + \alpha_4 \Delta \log(\text{DI})_{t-1} \\ & + \alpha_5 \Delta \text{LAB}_{t-1} + \alpha_6 \Delta \text{HC}_{t-1} + \alpha_7 \Delta \text{REXR}_{t-1} + \alpha_8 \Delta \text{INF}_{t-1} \\ & + \alpha_9 \Delta \log(\text{GOVEXP})_{t-1} + \text{ECT}_{t-1} + \mu_t \end{aligned}$$

Foreign
Borrowing,
ARDL, Aid,
Domestic
Investment,
Nigeria, Growth

Where $(\text{ODA}_t * \text{DI}_t)$ shows the interaction of ODA and DI with growth; $(\text{FB}_t * \text{DI}_t)$ indicates the interaction of FBI and DI with growth; $\log(\text{GOVEXP})$ is the log of government expenditure; Δ is the first difference operator; θ_0 is the drift components, g is maximum lag length; t is time, while ε is the error term, and ECT is Error correction time.

4. Results and Discussions

Stationary Test

The variables stationary test was ascertained by employing the Kwiatkowski-Phillips-Schmidt-Shin (KPSS) test as depicted in Table 1. The result displayed indicates that some of the variables are stationary at first difference 1(1) and while others are stationary at level 1(0). Hence, it becomes appropriate to use the ARDL technique since the variables are integrated at 1(1) and 1(0).

Stationarity test using kpss			
Variables	LM-statistics	Critical values 5%	Order of integration
GDP	0.11	0.146	1(1)
LOG(ODA)	0.062	0.146	1(1)
LOG(FB)	0.084	0.146	1(1)
LOG(DI)	0.144	0.146	1(1)
LAB	0.084	0.146	1(1)
HC	0.094	0.146	1(1)
REXR	0.103	0.463	1(1)
INF	0.06	0.146	1(1)
LOG(GOVEXP)	0.7	0.463	1(0)

Table 1.
Stationarity
Test

ARDL Bound Test

Table 2 shows the ARDL bound test for models 1 and 2. The essence of carrying out the ARDL bound test is to ascertain whether there is an existence of a long-run relationship among the variables. The outcome of the ARDL bound test in models 1 and 2 indicates that the computed F-statistic is greater than the upper critical bound. Hence, the alternative hypothesis (presence of a long-run relationship) is accepted while the null (absence of a long-run relationship) is rejected.

Table 2.
Bound Test of
ARDL

ARDL Bound Test					
	K	F-Statistics	Critical Value (%)	Lower Bound Val- ue	Upper Bound Val- ue
Model 1	8	5.64	1	2.79	4.1
			5	2.22	3.39
			10	1.95	3.06
Model 2	8	5.54	1	2.79	4.1
			5	2.22	3.39
			10	1.95	3.06

Regression Estimate

Utilizing the ARDL method, the study estimates the long and short-run coefficients. Table 3 presents the findings of the ARDL estimates.

Table 3.
Regression
Estimate

Model 1			Model 2		
Dependent GDPGR	variable		Dependent GDPGR	variable	
Varia- bles	Short-run co- efficient	Long-run coef- ficient	Varia- bles	Short-run co- efficient	Long-run co- efficient
LOG(ODA)	2.927** (0.817)	2.047** (0.48)	LOG(ODA *DI)	2.883*** (0.837)	2.019*** (0.492)
LOG(FB)	-2.20** (0.888)	-1.539*** (0.611)	LOG(FB* DI)	-2.310*** (0.821)	-1.618*** (0.564)
LOG(DI)	2.171* (1.205)	1.518* (0.848)	LOG(DI)	2.851* (1.475)	1.996* (0.994)
LAB	0.016 (0.042)	0.011 (0.029)	LAB	0.017 (0.042)	0.013 (0.029)
HC	-2.781 (2.855)	-1.945 (2.037)	HC	-2.628 (2.982)	-1.841 (2.132)
REXR	-0.018* (0.01)	-0.013* (0.007)	REXR	-0.017* (0.01)	-0.013 (0.007)
INF	0.071* (0.038)	0.049* (0.025)	INF	0.072* (0.038)	0.05* (0.025)
LOG(GOV EXP)	1.7102 (2.004)	1.196 (1.419)	LOG(GOV EXP)	1.901 (1.935)	1.331 (1.376)
ECT (-1)	-1.429*** (0.179)		ECT (-1)	1.428*** (0.181)	

Figures in bracket signify standard error; while ***, **, * signify a level of significance at 1%, 5%, and 10%.

As shown in table 3, findings from the model 1 outcome indicate that ODA enhances and spur growth positively. The result aligns with findings from Setargie Ejigu, (2015). More so, it was shown that foreign borrowing affects growth adversely which supports the outcomes (Kharusi & Ada, 2018; Ogege & Ekpudu, 2010), that indeed foreign borrowing retards growth since most of the borrowed funds are used to service previous debt. Also, domestic investment was found to spur growth and this supports the findings of (Bakari, 2017; Omoregie & Ikpesu, 2017), who documented that domestic investment positively influences growth.

Besides, findings from model 2 indicate a complementarity relationship was found when aid and domestic investment interact to affect growth suggesting that domestic investment is needed for aid to affect growth, while, a substitution effect was found when foreign borrowing and domestic investment interact to affect growth indicating that domestic investment is not a prerequisite before foreign borrowing can spur economic growth. Furthermore, the ECT coefficient is statistically significant and denotes a negative sign in models 1 and 2 outcomes.

Diagnostic Test Outcome

The diagnostic test was carried out by testing for serial correlation and heteroskedasticity. The essence of carrying out this test is to examine if the study outcome is suffering from serial correlation and heteroskedasticity. A research outcome suffering from serial correlation and heteroskedasticity cannot be employed for policy-making. The outcome of the diagnostic test is presented in Table 4.a and 4.b.

Diagnostic Test				
Model 1	F-Statistic	0.41	Prob. F(1,23)	0.53
	Obs*R-Squared	0.6	Prob.Chi-Square (1)	0.44
Model 2	F-Statistic	0.47	Prob. F(1,23)	0.5
	Obs*R-Squared	0.69	Prob.Chi-Square (1)	0.41

Table 4.a
Serial Correlation LM Test

Diagnostic Test				
Model 1	F-Statistic	1.718	Prob. F(9,24)	0.139
	Obs*R-Squared	13.321	Prob.Chi-Square (9)	0.149
Model 2	F-Statistic	1.888	Prob. F(9,24)	0.103
	Obs*R-Squared	14.094	Prob.Chi-Square (1)	0.798

Table 4.b
Heteroskedasticity Test

The outcome in table shows that there is no serial correlation in both models since the observed R-square probability exceeds 5%. Besides, the outcome in table also indicates that there is no heteroscedasticity in the model since the observed R-square probability exceeds 5%. In conclusion, model 1 and 2 is free from heteroscedasticity and serial correlation. The implication of this is that the study outcome can be used for policy-making.

Stability Test

Cusum tests and Cusum of squares test were employed to ascertain the stability of the models. The stability test for figures 1 and 2 indicates that the model is stable and dependable since the blue lines are in between the two red lines as shown in both figures thus indicating that the study outcome can be used for policy-making.

Figure 1.
Model 1
Stability
Outcome
Test

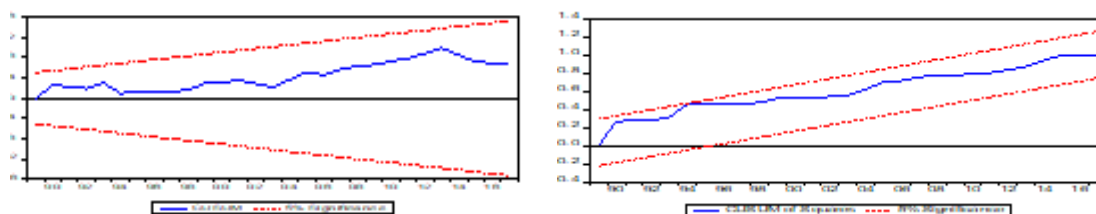
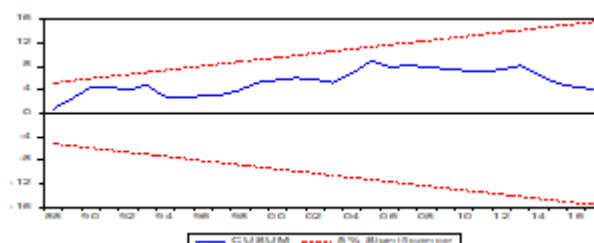


Figure 2.
Model 2
Stability
Outcome
Test



5. Conclusion

The review of extant studies in the literature has shown that the majority of developing economies (Nigeria inclusive) have often relied on public capital inflows (ODA and foreign borrowing) to augment savings and forex exchange gap. Despite these inflows to the developing economy, the region still witnessed poor growth and poverty among its populace. In answering the question of whether public capital inflows (ODA and foreign borrowing) and DI spur growth in emerging markets (Nigeria inclusive), the study utilized data obtained from world bank indicators and the central bank of Nigeria statistical bulletin between the period 1981 to 2017. The study outcome showed that while ODA and DI spur growth, foreign borrowing affects growth adversely in Nigeria. More so, the interaction of foreign aid and domestic investment indicates a complementarity relationship, while the interaction of foreign borrowing and domestic investment shows a substitution effect.

The study recommends that foreign aid should be attracted into the economy to raise the domestic investment level and spur growth. More so, the government needs to analyze the cost and benefit when considering the use of foreign borrowing to fund development projects by ensuring that the interest rate will not cause excessive burdens on the citizenry. Furthermore, foreign borrowing should be tied to productive projects and not white elephant projects.

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Foreign
Borrowing,
ARDL, Aid,
Domestic
Investment,
Nigeria, Growth